CLAIMS

The claimed invention is:

1. A method for managing a group of to-be-managed nodes comprising the steps of:

(a) forming a particular packet containing a network layer header, including a destination address designating receipt of the packet by a group of nodes, a second header identifying a syntax and semantic by which a payload of the packet may be parsed in a predefined fashion, and a payload containing an identifier previously assigned for designating a particular group of one or more nodes as recipients of the message, wherein a plurality of nodes is divided into one or more groups, including the particular group, and a particular message to be executed by each node of the group,

(b) transmitting the particular packet to one or more nodes, including the particular group of nodes,

wherein each node receiving the particular packet but not previously assigned the identifier contained therein ignores the packet, and

wherein each node of the particular group, but only the nodes of the particular group, executes the particular message contained in the particular packet.

2. The method of claim 1 wherein said message is a command.

3. The method of claim 1 wherein said message is one of a command message, or a file download message.

4. The method of claim 2 further comprising the step of:

(c) after transmitting the particular packet, transmitting a second packet to one or more nodes, including the particular group of nodes, which contains a second command for initiating execution of the particular command contained in the previously transmitted particular packet.

5. The method of claim 4 further comprising the step of:

(d) after transmitting the particular packet but before transmitting the second packet, transmitting one or more additional packets which each contain one or more additional commands,

wherein execution of the particular and additional commands is deferred until receiving the second command.

6. The method of claim 2 further comprising the step of:

(c) assigning a unique session identifier to each of the groups as the identifier.

7. The method of claim 2 wherein the plural nodes are hierarchically organized into parent groups and subgroups of parent groups, wherein each parent group contains of set of nodes including each node contained in each subgroup of that specific parent group.

8. The method of claim 2 wherein step (b) transmits said packet plural times after a predetermined delay.

9. A method for managing a group of to-be-managed nodes comprising the steps of:

(a) receiving a particular packet containing a network layer header, including a destination address designating receipt of the packet by a group of nodes, a second header identifying a syntax and semantic by which a payload of the packet may be parsed in a predefined fashion, and a payload containing an identifier which has been previously assigned to a particular group of one or more nodes, wherein plural nodes are divided into one or more groups, including the particular group and a particular message to be executed by each node of the particular group,

(b) at a given node, ignoring the particular packet if the identifier does not match any identifier assigned to the given node, and

(c) executing the particular message contained in the particular packet if the identifier matches an identifier assigned to the given node.

10. The method of claim 9 wherein said message is a command.

11. The method of claim 9 wherein said message is one of a command message or a file download message.

12. The method of claim 10 further comprising the step of:

(e) after receiving the particular packet, receiving at the given node a second packet which contains a second command for initiating execution of the particular command contained in the previously received particular packet.

13. The method of claim 12 further comprising the steps of:

(f) after receiving the particular packet but before receiving the second packet, receiving at the given node one or more additional packets which each contain one or more additional commands,

(g) deferring at the given node execution of the particular and additional commands until receiving the second command.

14. The method of claim 12 wherein each group is assigned a unique session identifier as the identifier.

15. The method of claim 12 wherein the plural nodes are hierarchically organized into parent groups and subgroups of parent groups, wherein each parent group contains of set of nodes including each node contained in each subgroup of that specific parent group.

16. A sequence of one or more packets for controlling a group of one or more to-be-managed nodes, including a first packet, the first packet of the sequence comprising:

(a) a network layer header, including a destination address designating receipt of the packet by a group of nodes

(b) a second header, identifying the packet as being parse-able according to a predefined syntax and semantic,

(c) an identifier assigned to a particular group of one or more to-be-managed nodes, the identifier being chosen from a set of identifiers, wherein each

identifier of the set is uniquely assigned to a different group of to-be-managed nodes, wherein plural to-be-managed nodes are divided into one or more of the groups, and

(d) a message to be executed.

17. The method of claim 16 wherein said message is a command.

18. The method of claim 16 wherein said message is one of a command message and a file download message.

19. The sequence of packets of claim 17 further comprising a second packet following the first packet, the second packet comprising:

(e) a network layer header, including the destination address designating receipt of the packet by the group of nodes,

(f) the identifier assigned to the particular group of one or more to-be-managed nodes, and

(g) a command for initiating execution of each command carried in packets of the sequence prior to receipt of the second packet, including the command contained in the first packet,

wherein each to-be-managed node of the particular group defers execution of each of the commands carried in packets of the sequence until receiving the second packet.